Southeast Phytoplankton Monitoring Network

Promoting a better understanding of
Harmful Algal Blooms by way of
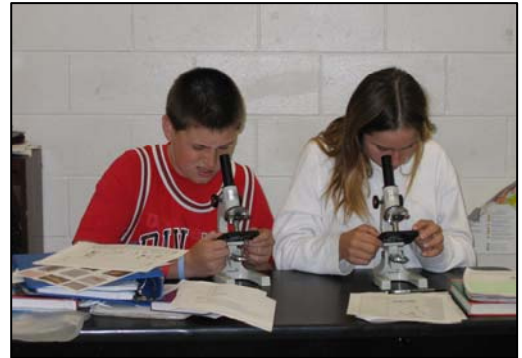Volunteer Monitoring

Partnering With: D H E C   Sea Grant

Helpful Tips to Care and Use the Microscope

Caring for Your Microscope

To keep your microscope in good condition, follow these simple steps:

1. Carry your microscope using two hands, hold the arm and support the base.

2. Avoid touching the lens surfaces with your fingers.

3. Use lens tissue paper to clean the lens surfaces.

4. Do not adjust any of the focusing knobs until you are ready to use the microscope.

5. Always focus first using the coarse adjustment knob, with the lowest-power objective lens in position.

6. Only use the fine adjustment knob when either the medium-power or high-power objective lens is in position.

7. Cover the microscope when you are done to prevent dust collection on the microscope.

Using a Microscope

Procedure:

1. Place the microscope on a flat surface.

2. If using a microscope with a mirror, do not use direct sunlight as the light source. Eye damage can result. If using a microscope with a light, turn off light when not in use.

3. Be cautious when handling glass slides and cover slips.

4. The microscope should always be stored with the lowest-power objective in position. If your microscope has not been stored that way, look from the side and rotate the revolving nosepiece until the lowest-power objective clicks into place.

5. Use the coarse-adjustment knob to lower the lowest-power objective until the lens is about 1 cm above the stage.

6. Look through the eyepiece and adjust the diaphragm until the brightness is at a comfortable level for your eyes.

7. To reduce eyestrain, keep both eyes open when looking through the microscope. Also, keep eyes a little above the eyepiece when viewing you will get less eyelash interference.

8. Once the object that you are looking at comes into clear view, you should not need to use the coarse adjustment again. When switching to a higher power, move the objective slowly and use the fine adjustment if needed.